

REMARKS

This Amendment is submitted in response to the non-final Office Action mailed on April 14, 2009. A petition for a one month extension is submitted herewith. The Director is authorized to charge \$130.00 for the petition for a one month extension of time, and any additional fees that may be required, or to credit any overpayment to Deposit Account No. 02-1818. If such a withdrawal is made, please indicate the Attorney Docket No. 112701-610 on the account statement.

Claims 1-23 are pending in this application. In the Office Action, Claims 1-23 are rejected under 35 U.S.C. §103. In response, Claims 1, 7, 9-17, 19-20 and 22-23 have been amended and Claim 6 has been canceled. The amendments do not add new matter. In view of the amendments and/or for at least the reasons set forth below, Applicants respectfully submit that the rejection should be withdrawn.

In the Office Action, Claims 1-5, 8, 11 and 16 are rejected under 35 U.S.C. §103(a) as being unpatentable over EP 1,178,118 A1 to Biji et al. ("*Biji*") in view of Bailey's Industrial Oil and Fat Products, 5th Ed. Vol. 4 ("*Bailey's*"). Claims 6-7, 9-10, 12-17 and 19-23 are rejected under 35 U.S.C. §103(a) as being unpatentable over *Biji* in view of *Bailey's* and further in view of International Patent Application No. WO 92/012711 or U.S. Patent No. 5,550,156 to Martek ("*Martek*") or GB 2,241,503 A to Polman et al. ("*Polman*"). Applicants respectfully disagree with and traverse the rejections for at least the reasons set forth below.

Applicants have amended independent Claims 1 and 11-17 to recite, in part, bringing a carrier oil into contact with the pressed cake of the biomass so as to form a mixture and transfer long-chain polyunsaturated fatty acid(s) in the form of triacylglycerols to the carrier oil, and pressing the mixture to obtain a second pressed oil. The amendments are supported in the specification, for example, at page 5, lines 20-26. In contrast, even if combinable, the cited references fail to disclose or suggest each and every element of independent Claims 1 and 11-17.

Applicants have surprisingly found a method for producing a stable oil having a suitable long-chain polyunsaturated essential fatty acids ("LC-PUFA") concentration that is appropriate for specific applications such as foodstuffs, in nutritional supplements, in cosmetics or in pharmaceutical compositions. In an embodiment, the preparation of the stable oil is carried out by direct pressing of a biomass containing LC-PUFAs and production of a first pressed oil. To

increase the LC-PUFA yield, the pressed biomass cake obtained from the direct pressing is brought into contact with a carrier oil and the mixture is subjected to a second pressing in order to obtain a second press oil. The two pressed oils are then mixed in variable proportions so as to obtain an LC-PUFA concentration that is appropriate for the specific application. The mixture can then be subjected, where appropriate, to physical refining and the desired oil is thus obtained.

Biji and *Bailey's* fail to disclose or suggest bringing a carrier oil into contact with the pressed cake of the biomass so as to form a mixture as required by independent Claims 1 and 11-17. *Biji* and *Bailey's* also fail to disclose or suggest pressing the mixture to obtain a second pressed oil as required by independent Claims 1 and 11-17. *Biji* is entirely directed to a wet process for obtaining oil from a biomass. See *Biji*, Abstract, lines 4-13; column 3, lines 9-24; column 4, lines 22-29. *Bailey's* is directed to treating the oil with an adsorbent. Nevertheless, *Biji* and *Bailey's* do not teach combining a previously pressed cake of the biomass with a carrier oil and then pressing the mixture to obtain a second pressed oil. Moreover, the Patent Office has failed to provide any support within *Biji* and *Bailey's* regarding these elements.

Similarly, *Martek* and *Polman* fail to disclose or suggest bringing a carrier oil into contact with the pressed cake of the biomass so as to form a mixture as required by independent Claims 1 and 11-17. *Martek* and *Polman* also fail to disclose or suggest pressing the mixture to obtain a second pressed oil as required by independent Claims 1 and 11-17. Although *Martek* discloses the use of microbial oils, *Martek* only teaches oil extraction techniques using solvents such as hexane. *Polman* is directed to the use of fish and vegetable oils and fails to teach or even suggest any specific methods for obtaining oil from microorganisms.

Finally, one of ordinary skill in the art would have no reason to combine *Biji* and *Bailey's* to arrive at the present claims because the Patent Office's proposed combination would change the principle of operation of the cited references. If the proposed modification or combination of the prior art would change the principle of operation of the prior art invention being modified, then the teachings of the references are not sufficient to render the claims prima facie obvious. *In re Ratti*, 270 F.2d 810, 123 USPQ 349 (CCPA 1959).

Biji is entirely directed to washing the cell walls of a biomass with water and subsequently separating the aqueous phase (containing the cell wall debris) from the oil phase to remove the particulate matter in the cell wall debris from the oil. See *Biji*, Abstract, lines 4-13.

As such, the oil obtained in *Biji* is free from cell wall debris because such debris is contained in the aqueous phase. See *Biji*, column 3, lines 14-17; column 4, lines 22-29.

The Patent Office relies on *Bailey's* for the disclosure of treating the crude oil with an adsorbent. However, the portions of *Bailey's* relied on by the Patent Office are directed to utilizing bleaching clay as an adsorbent to remove particulate matter such as pigments, soaps and phosphatides from the crude oil. See *Bailey's*, page 396, Section 1.7. If one of ordinary skill in the art added the adsorbent disclosed in *Bailey's* to the debris-free oil obtained by *Biji* as suggested by the Patent Office, it would change the principle of operation of *Biji* because the particulate matter would already be removed from the oil and the use of the adsorbent would add particulates back into the oil. This would require an additional particulate removal process that would likely be unnecessary while adding an additional expense. Thus, one of ordinary skill in the art would have no reason to combine the cited references to arrive at the present claims.

In sum, the cited references alone or in combination fail to disclose or suggest each and every element of independent Claims 1 and 11-17. Moreover, the cited references fail to even teach or recognize the advantages, benefits and/or properties of the multiple press methods for obtaining a stable oil in accordance with the present claims. Consequently, independent Claims 1 and 11-17, along with the claims that depend from Claims 1 and 11-17, are novel and non-obvious over the cited references.

Accordingly, Applicants respectfully request that the rejections of Claims 1-23 under 35 U.S.C. §103(a) be withdrawn.

For the foregoing reasons, Applicants respectfully request reconsideration of the above-identified patent application and earnestly solicit an early allowance of same. In the event there remains any impediment to allowance of the claims that could be clarified in a telephonic interview, the Examiner is respectfully requested to initiate such an interview with the undersigned.

Respectfully submitted,

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